

February 26, 2019

VIA ECFS

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Office of Engineering and Technology and Wireless Telecommunications Bureau Seek Comment on 5GAA Petition for Waiver to Allow Deployment of Cellular Vehicle-to-Everything (C-V2X) Technology in the 5.9 GHz Band, GN Docket No. 18-357

Dear Ms. Dortch:

The Intelligent Transportation Society of America (“ITS America”) hereby submits its Reply to the Comments submitted in response to the Petition for Waiver submitted by the 5G-Automobile Association (“5GAA”) to the Federal Communications Commission (“FCC” or “Commission”) in GN Docket No. 18-357.¹

The Commission received more than 40 submissions in response to the request for comment regarding the Petition for Waiver submitted by 5GAA.² The submissions included, among others, Comments from automakers such as Ford, General Motors, Volvo, and Honda; industrial and telecommunications organizations such as Qualcomm, Cisco, Nokia, Ericsson, and T-Mobile; and state departments of transportation. Aside from a small number of Commenters with interests in occupying the 5.85-5.925 GHz band (“5.9 GHz Band”) with other uses, the Comments confirm the significant existing and expected use of the 5.9 GHz Band by Vehicle-to-Everything (“V2X”) technology. The Comments conclusively demonstrate the sizable on-going public and private sector investment in both Cellular Vehicle-to-Everything (“C-V2X”) and Dedicated Short Range Communication (“DSRC”) technology for lifesaving V2X services. The Comments emphasize the safety benefits of V2X, and show that contrary to critics, the 5.9 GHz Band has significant users and cannot easily be usurped for other purposes.

The Comments demonstrate the great safety benefits of V2X. For example, the Safety Spectrum Coalition notes that V2X represents a breakthrough in auto safety that enables vehicles to communicate with other vehicles, infrastructure, communications networks, and pedestrians in real time to reduce

¹ Petition for Waiver to Allow Deployment of Intelligent Transportation Cellular Vehicle to Everything (C-V2X) Technology, Petition for Waiver, GN Docket No. 18-357 (filed Nov. 21, 2018) (“5GAA Waiver Petition”).

² *Office of Engineering and Technology and Wireless Telecommunications Bureau Seek Comment on 5GAA Petition for Waiver to Allow Deployment of Cellular Vehicle-to-Everything (C-V2X) Technology in the 5.9 GHz Band, Public Notice*, GN Docket No. 18-357, DA 18-1231 (rel. Dec. 6, 2018).

traffic accidents and improve roadway safety.³ The Maryland Department of Transportation notes that “a fully integrated automated and connected community with [V2X] technology will increase situational awareness by enabling all vehicles in the fleet to communicate with each other and the infrastructure on public roads, thereby greatly improving safety and traffic flow.”⁴ Honda Motor Company, Inc. (“Honda”) notes that V2X is “an integral piece of [the company’s] vision of a collision-free future.”⁵ Additionally, Honda stated that it is testing a V2X system called SAFE SWARM in partnership with the Ohio Department of Transportation and the Ohio State University that allows vehicles to speak with both other vehicles and infrastructure to share information regarding road conditions and prevent traffic congestion.⁶ Continued deployment of V2X technologies will increase roadway safety by allowing vehicles and infrastructure to communicate in real time regarding roadway and traffic conditions.

The Comments conclusively and definitively rebut the view of those who claim that the 5.9 GHz Band lies “mostly vacant.”⁷ The American Association of State Highway and Transportation Officials (“AASHTO”) notes that “26 states . . . have committed significant resources deploying DSRC-enabled equipment at more than 200 traffic signals, with more than 2,100 additional signals programmed for installation in the near future.” AASHTO further observes that the Colorado Department of Transportation, Maine Department of Transportation, and the Wyoming Department of Transportation were awarded funding by the US Department of Transportation to make infrastructure improvements that will include deployment of DSRC units.⁸

General Motors Company (“GM”) notes that V2X will be deployed in every Cadillac model after 2023 and emphasizes the recent announcement by Toyota that all Toyota and Lexus vehicles will include V2X equipment beginning in 2021.⁹ All of the vehicles manufactured by GM and Toyota that contain V2X equipment will rely on the 5.9 GHz Band for communication among the vehicles and other vehicles and infrastructure. Ford Motor Company (“Ford”) announced its plans to deploy cellular vehicle-to-everything (“C-V2X”) in all new vehicles beginning in 2022.¹⁰ Ford’s announcement emphasizes the widespread use of the 5.9 GHz Band for lifesaving technology. Volkswagen Group of America, Inc. (“Volkswagen”) urged the Commission to protect the entire 5.9 GHz Band for road safety applications because it will give innovators the regulatory certainty and flexibility they need to continue with deployment of V2X systems.¹¹ The Association of Global Automakers, Inc. (“Global Automakers”) argues that the “entire auto-ecosystem as well as the U.S. Department of Transportation” has moved beyond the question of whether the entire 5.9 GHz Band is needed for V2X and is currently evaluating how that implementation should occur.¹² The protection of the entire 5.9 GHz Band is necessary to ensure the

³ Comments of the Safety Spectrum Coalition, GN Docket No. 18-357, at 1 (Feb. 8, 2019) (“Safety Spectrum Coalition”).

⁴ Comments of Maryland Department of Transportation, GN Docket No. 18-357, at 2 (Jan. 18, 2019) (“MDOT”).

⁵ Comments of Honda Motor Company, Inc., GN Docket No. 18-357, at 2-3 (Jan. 25, 2019) (“Honda”).

⁶ *Id.*

⁷ Letter from Michael Calabrese, Director, Wireless Future Project at the Open Technology Institute at New America, to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 18-357, at 2 (filed Feb. 21, 2019).

⁸ Comments of American Association of State Highway and Transportation Officials, GN Docket No. 18-357, at 3 (Jan. 11, 2019) (“AASHTO”).

⁹ Comments of General Motors Company, GN Docket No. 18-357, at 2-3 (Jan. 18, 2019) (“GM”).

¹⁰ Comments of Ford Motor Company, GN Docket No. 18-357, at 2 (Jan. 24, 2019) (“Ford”).

¹¹ Comments of Volkswagen Group of America, Inc., GN Docket No. 18-357, at 1 (Jan. 30, 2018) (“Volkswagen”).

¹² Comments of the Association of Global Automakers, Inc., GN Docket No. 18-357, at 4 (Feb. 7, 2019) (“Global Automakers”).

continued deployment of lifesaving V2X technology by automakers, equipment manufacturers, and state departments of transportation.

Volvo Group North America (“Volvo”) notes its agreement with the National Highway Traffic Safety Administration (“NHTSA”) that the entire 5.9 GHz Band should be protected and that no decision should be made regarding band re-allocation until after the entire three-phase test plan is completed. ITS America agrees with Volvo that the Commission must allow the completion of the three-phased test plan established by the Office of Engineering and Technology (“OET”) to determine whether entry by U-NII devices into the 5.9 GHz Band would cause harmful interference to incumbent licensees. OET released the Phase I testing results in October 2018,¹³ and the FCC should ensure that Phases II and III proceed as planned. ITS America noted in 2016, and reiterated in 2018, that it supported the sharing of the 5.9 GHz band between ITS and U-NII devices, but only if testing determined that unlicensed devices in the band would not cause harmful interference to ITS services.¹⁴

Sincerely,

/s/ Steven H. Bayless

Steven H. Bayless

Vice President, Public Policy and Regulatory Affairs

Intelligent Transportation Society of America

Robert B. Kelly, Esq.

Squire Patton Boggs (US) LLP

2550 M Street, N.W.

Washington, D.C. 20037

Of Counsel

¹³ See *Office of Engineering and Technology Requests Comment on Phase I Testing of Prototype U-NII-4 Devices, Public Notice*, ET Docket No. 13-49, DA 18-1111 (rel. Oct. 29, 2018).

¹⁴ See Comments of ITS America, ET Docket No. 13-49, at 2 (Nov. 28, 2018).